

CLAIMS

1. A sensor comprising a medium and, disposed therein, a hologram, wherein an optical characteristic of the hologram changes as a result of a variation of a physical property of the medium, and wherein the hologram is formed as a non-planar mirror.  
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2. A sensor according to claim 1, wherein the hologram is formed as a concave mirror.
3. A sensor according to claim 1, wherein the hologram is formed as a convex mirror.
- 10 4. A sensor according to claim 1, wherein the hologram is formed as a corner cube prism.
5. A method for the production of a sensor according to any of claims 1 to 4, which comprises forming, in a medium, a hologram as a non-planar mirror.
- 15 6. A method according to claim 5, wherein the hologram is recorded in a non-planar medium.
7. A method according to claim 6, wherein the hologram is recorded using a planar mirror.
8. A method according to claim 5 or claim 6, wherein the hologram is recorded using a non-planar mirror.
- 20 9. A method according to claim 8, wherein the hologram is recorded using a concave mirror.
10. A method according to claim 8, wherein the hologram is recorded using a mirror capable of effecting retroreflection.
- 25 11. A method according to claim 10, wherein the hologram is recorded using a corner cube prism.
12. A method according to claim 8, wherein the hologram is recorded using one or more reflective beads.
13. A method according to any of claims 5 to 12, wherein the hologram is recorded using a lens, aperture, slit or obstacle, or a combination thereof, placed  
30 between the light source and the medium.

14. A method for the detection of an analyte, which comprises remotely interrogating, with light, the holographic element of a sensor according to any of claims 1 to 4; and detecting any change in an optical characteristic of the sensor.
15. A method according to claim 14, wherein the light is collimated.